BY ORDER OF THECOMMANDER
305TH RESCUE SQUADRON

305th RESCUE SQUADRON INSTRUCTION
21-102

19 January 1999

Maintenance

FOREIGN OBJECT DAMAGE PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

OPR: 305 RQS/LGMP
(MSgt Timothy J. Monzingo)

Certified by: 305 RQS/LG (Capt Keith Belhumeur)

Supersedes 305 RQSI 21-102, 20 October 1996

Pages: 6
Distribution: F:

This instruction implements AFPD 21-1 and will be used in conjunction with AFI 21-101, AFRCI 21-101, and AFOSH Standard 91-100. It serves as a guide for the squadron Foreign Object Damage and Debris (FOD) Prevention Program. The intent of this program is to focus on education, prevention, identification of potential hazards, elimination of causes, and reporting procedures. This instruction assigns responsibilities and outlines procedures necessary to reach this goal.

SUMMARY OF REVISIONS

This revision has substantial changes and must be completely reviewed.

1. FOD Prevention Committee:

1.1. The Squadron FOD Prevention Committee will consist of a Maintenance Officer (FOD Prevention Officer), Maintenance Superintendent, a representative from each Maintenance Flight, Operations, and Safety Office (SE).

1.2. A FOD Committee representative will attend the monthly base FOD meeting. The committee member will brief the Base FOD meeting minutes during the next daily production meeting. Send information copy to SE. All issues will be discussed and resolution to any FOD problems will be presented at this time.

1.3. A FOD committee representative will complete the Squadron FOD Prevention Inspection Checklist (Attachment 1) at least quarterly under direction of the FOD Prevention Officer. This individual will brief their results with the committee during the next daily production meeting and info SE after completion of the checklist.

1.4. The FOD Prevention Committee will oversee the unit training assembly FOD walks. This FOD walk will encompass the hangar and aircraft-parking ramp. Normally scheduled on Saturday morning

of the UTA, all available personnel will report to the north end of the parking ramp at 0745 for this FOD walk.

2. Responsibilities. It is the responsibility of all supervisors to ensure compliance with this instruction. FOD prevention is a responsibility of all personnel.

2.1. All personnel will ensure hats worn on the flight line are removed within 50 feet of an operating helicopter. All line badges will be secured when worn on the flight line.

2.2. Due to ramp exposure, the expediter is in an excellent position to evaluate the flight line FOD condition. When necessary, the expediter will recommend mechanical sweeper support or a FOD walk through Plans and Scheduling (LGLP).

2.3. The aircraft crew chief is responsible for policing the area surrounding the aircraft. Specialists will not leave a job site until the work area has been policed.

2.4. Any person discovering or suspecting damage to an aircraft will immediately report the finding to the flight line expediter. The expediter will contact the LGLP, who will then contact the Squadron FOD Monitor, Quality Assurance (LGQ), the Deputy Commander for Maintenance (LG), and SE. Once the appropriate paperwork is filled out and completed for either FOD reporting or dropped object and coordinated through the required chain of command, the unit FOD monitor will fax a courtesy copy of the report to 355 WG/CVFM, the Base FOD Monitor.

2.5. The Sortie Generation Flight Chief will ensure suitable containers for the collection of FOD are placed on the northwest and southwest corners of Building 1750, and that these containers are emptied on a regular basis.

2.6. LGLP will request powered sweepers to clean the flight line ramp on an as required basis.

2.7. Newly assigned personnel will receive initial FOD prevention briefings by their duty section supervisor and will be scheduled for an annual briefing by their respective training section.

3. Inspection Procedures:

3.1. FOD prevention will be an item of special interest during all LGQ inspections and evaluations.

3.2. An intake inspection will be accomplished prior to engine motoring or engine start for ground run-up. The individual performing the motoring or running of the engine is responsible for ensuring the intake inspection has been accomplished.

3.3. When maintenance is performed (not scheduled inspections) in or near the immediate vicinity of the engine intake duct area, an engine intake inspection is required and will be documented. Once the maintenance action is completed, the mechanic will document the requirement for an intake inspection in the next open block of AFTO Form 781A**, Maintenance Discrepancy and Work Document**, and will use a red "X" symbol. An inspector will complete the inspection and then clear the red "X" symbol in the inspected by block.

3.4. Flight chiefs will accomplish a monthly FOD inspection of their areas. Using the FOD Prevention Checklist (Attachments 2 or 3) whichever is applicable to the flight, a report will be accomplished on AFRC Form 52, **Notice of Unsafe/Unhealthy Condition**, in duplicate whenever a problem exists. The original will be routed to the activities for corrective action with the final routing to the LG for review. The duplicate copy is forwarded to SE for use in aircrew briefing information.

3.5. Refer to 305 RQSI 21-107, *Impoundment of Aircraft and Equipment*, for impoundment procedures.

KENT D. CLARK, Colonel, USAFR
Commander

Attachment 1

SQUADRON FOD PREVENTION INSPECTION CHECKLIST

A1.1. Check parking ramps, taxiways, engine run-up areas, and other maintenance and storage areas for cleanliness and condition of pavement.

A1.2. Check for debris and surface conditions of parking ramps and taxi areas.

A1.3. Check mechanical sweeping operation to make sure it is doing a good job.

A1.4. Check streets and approaches that lead onto ramps to make sure foreign objects are not being carried on to the flight line by vehicles.

A1.5. Inspect pavement cracks and expansion joints for debris the mechanical sweeper may have missed. Direct cleaning by hand, if necessary.

A1.6. Ask a few supervisors to make sure they know how to request mechanical sweepers and find out if they are asking for the service as needed.

A1.7. Observe to see if personnel are doing a good job pick up debris.

A1.8. Check to make sure there are enough FOD containers and they are emptied in a timely manner.

A1.9. Spot check general housekeeping in the work area.

A1.10. Observe people at work for FOD-prevention habits.

A1.11. Check to see that open aircraft, engine, and component lines are covered with proper plugs or caps to stop foreign objects from entering.

A1.12. Discuss the FOD program with supervisors and observe their interest in the program.

A1.13. Observe personnel at work around aircraft with engines running for safe practices that will aid the FOD prevention program.

A1.14. Check corrective action from previous FOD mishap reports.

A1.15. Review FOD reports for trends and adequacy of training.

A1.16. Review unit FOD training program. Provide help where needed.

A1.17. Check for compliance with AFRCI 21-101, as well as MAJCOM and local directives, and brief the FOD committee on findings.

Attachment 2

SORTIE GENERATION FLIGHT FOD PREVENTION CHECKLIST

A2.1. Are aircraft parking ramps and areas around the hangar clean?

A2.2. Do any of the above areas have pavement deterioration?

A2.3. Is there any debris on approaches to ramp areas that could be carried on to the flight line by squadron vehicles?

A2.4. Are there any areas that require cleaning by the mechanical sweeper?

A2.5. Are areas rechecked after cleanup by the mechanical sweeper?

A2.6. Are cracks and expansion joints free of debris?

A2.7. Do supervisory personnel know the procedures for requesting the sweeper, and are they requesting it when necessary?

A2.8. Do personnel clean up debris after completing a job on the aircraft?

A2.9. Do flight line and dock personnel inspect areas around aircraft for debris at the end of a work shift?

A2.10. Do flight line personnel inspect areas around aircraft before engine runs or aircraft launches?

A2.11. Are personnel conscientiously picking up foreign objects?

A2.12. Are FOD receptacles checked regularly and emptied when necessary?

A2.13. Are engine intake plugs installed?

A2.14. Are flight line personnel knowledgeable of the FOD programs?

A2.15. Are crew chiefs inventorying and controlling tools as required?

A2.16. Are personnel checking to ensure there are no loose articles in the aircraft prior to engine or rotor operation (i.e., jackets, rags, or paper products)?

A2.17. Are all bullet casings and clips removed from aircraft after gun missions?

Attachment 3

IN-SHOP FOD PREVENTION CHECKLIST

A3.1. Are workbenches free of the following when not in use:

A3.1.1. Excessive test equipment?

A3.1.2. Solder, safety wire, tools, or other objects?

A3.1.3. Shipping boxes and crates?

A3.2. Are tables and shelves free of unnecessary materials?

A3.3. Are personnel accounting for tools taken from the shop to perform maintenance on aircraft?

A3.4. Are personnel cleaning up all debris in work area?

A3.5. Do personnel check work areas for FOD prior to departing?

A3.6. Are open aircraft and engine lines capped or plugged to prevent entrance of foreign objects?

A3.7. Is life raft inspection area free of splinters, sharp projectiles, and oil stains?

A3.8. Are suitable containers provided for metal scraps?

A3.9. Are there a sufficient number of waste receptacles available?

A3.10. Do personnel look for loose hardware and parts in aerospace ground equipment?